ERRATUM

Erratum to: *Nitrospirillum irinus* sp. nov., a diazotrophic bacterium isolated from the rhizosphere soil of *Iris* and emended description of the genus *Nitrospirillum*

Eu Jin Chung · Tae Soon Park · Kyung Hyun Kim ·
Che Ok Jeon · Hae-In Lee · Woo-Suk Chang ·
Zubair Aslam · Young Ryun Chung

Published online: 22 September 2015
© Springer International Publishing Switzerland 2015

**Erratum to: Antonie van Leeuwenhoek (2015)
108:721–729
DOI 10.1007/s10482-015-0528-x**

In the original publication of the article, the species epithet “*irinus*” proposed for the taxon represented by strain YC6995^T has been malformed. The correct name for the taxon should have been proposed as “*iridis*”. The revised description is given below:

Description of *Nitrospirillum iridis* sp. nov.

Nitrospirillum iridis ((i'ri.dis. L. gen. n. *iridis*, of *Iris*, isolated from the rhizosphere soil of *Iris ensata* var. *spontanea* (Makino) Nakai).

The online version of the original article can be found under doi:[10.1007/s10482-015-0528-x](https://doi.org/10.1007/s10482-015-0528-x).

E. J. Chung · T. S. Park · Y. R. Chung (✉)
Division of Applied Life Science (BK 21 Plus), Plant
Molecular Biology & Biotechnology Research Center,
Gyeongsang National University, Jinju 660-701, Republic
of Korea
e-mail: yrchung@gnu.ac.kr

K. H. Kim · C. O. Jeon
Department of Life Science, Chung-Ang University,
Seoul 156-756, Republic of Korea

H.-I. Lee · W.-S. Chang
Department of Biology, University of Texas-Arlington,
Arlington, TX 760194, USA

Gram-negative, rod-shaped, facultatively anaerobic rods with 1.0–1.3 µm in width, and 1.8–2.9 µm in length. Cells are motile by a single polar flagellum. Colonies on R2A agar are white, and circular with an entire margin. The temperature range for growth is 10–35 °C, with optimum growth occurring at 30 °C. The pH range for growth is 4.0–7.5 with optimum growth at pH 7.0. Cell growth can occur at 0–0.2 % NaCl (w/v); optimum growth occurs without NaCl. Cells are catalase and oxidase-positive. Cells have the ability to hydrolyze L-tyrosine and Tween 20, but not Tween 80, carboxymethyl cellulose, gelatin, and starch. Positive reaction occurs for nitrogen fixation. Using the API50CH kit, D-xylose, L-rhamnose, esculin ferric citrate, salicin, D-cellobiose, D-maltose, D-saccharose, D-trehalose, gentiobiose and D-fucose can be used as sole carbon sources, but not glycerol, erythritol, D-arabinose, L-arabinose, D-ribose,

W.-S. Chang
Division of Biotechnology, College of Environmental and
Bioresource Sciences, Chonbuk National University,
Iksan 570-752, Republic of Korea

Z. Aslam
Department of Agronomy, University of Agriculture,
Faisalabad 38040, Pakistan

D-xylose, L-xylose, D-adonitol, methyl- β -D-xylopyranoside, D-galactose, D-glucose, D-fructose, D-mannose, L-sorbose, dulcitol, inositol, D-mannitol, D-sorbitol, methyl- α -D-mannopyranoside, methyl- α -D-glucopyranoside, *N*-acetylglucosamine, amygdalin, arbutin, D-lactose, D-melibiose, inulin, D-melezitose, D-raffinose, amidon, glycogen, xylitol, D-turanose, D-lyxose, D-tagatose, L-fucose, L-arabitol, D-fucose, L-fucose, D-arabitol, L-arabitol, potassium gluconate, potassium 2-ketogluconate and potassium 2-ketogluconate. Enzyme activities for alkaline phosphatase, esterase (C4), esterase lipase (C8), leucine arylamidase, valine arylamidase, cystine arylamidase, trypsin, α -chymotrypsin, acid phosphatase, naphthol-AS-BI-phosphohydrolase, α -galactosidase, β -galactosidase,

β -glucuronidase, α -glucosidase, β -glucosidase, *N*-acetyl- β -glucosaminidase, and α -fucosidase are present, but lipase (C14) and α -mannosidase are absent using the API ZYM kit. The polar lipids are phosphatidylcholine, phosphatidylethanolamine, phosphatidylglycerol, phosphatidylmethylethanolamine, and unidentified glycolipids. The major cellular fatty acids are $C_{18:1}$ $\omega 7c$, $C_{18:1}$ 2-OH, $C_{16:0}$ 3-OH and $C_{16:0}$. The major isoprenoid quinone is Q-10. The DNA G+C content of the type strain is 64.1 mol%.

The type strain, YC6995^T (= KACC 13777^T = DSM 22198^T), was isolated from the rhizosphere soil of *Iris ensata* var. *spontanea* (Makino) Nakai inhabiting the wetland on Jiri Mountain, Korea.